

Genetic Improvement of Livestock and Poultry



Editors

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Contents

<i>Foreword</i>	v
<i>Preface</i>	vii
<i>Contributors</i>	xi

Part – I: Conventional Breeding Methods

1. Sustainability of Indigenous Cattle: Breeding Strategies and Future Prospects ..	3
<i>R.S. Gandhi</i>	
2. Characterization and Evaluation of Hill Cattle of Uttarakhand	11
<i>R.K. Pundir, P.K. Singh, Neelkant, B. Prakash and C.V. Singh</i>	
3. Evaluation of Sires Using Different Multitrait Sire Evaluation Methods in Crossbred Cattle	19
<i>T.G. Moges, C.V. Singh and R.S. Barwal</i>	
4. Comparative Study of Different Sire Evaluation Methods Using First Lactation and Life Time Traits in Crossbred Cattle	31
<i>V.K. Singh and C.V. Singh</i>	
5. Buffalo Breeding Research and Improvement Strategies in India	41
<i>C.V. Singh, R.S. Barwal and C.B. Singh</i>	
6. Breeding Policy and Programmes for Genetic Improvement of Cattle and Buffalo Resources of Rajasthan	53
<i>C.B. Singh, C.V. Singh and R.S. Barwal</i>	
7. Genetic Improvement of Buffaloes for Milk Production	63
<i>R.K. Sethi</i>	
8. Buffalo Breeding Policy: Past, Present and Future Perspectives	79
<i>Rajkumar, Y.P. Singh and Ravinder Kumar</i>	
9. Conservation of Bhadawari Buffaloes	87
<i>B.P. Kushwaha, Sultan Singh, S.B. Maity and K.K. Singh</i>	

10. Sustainability of Milk Production in Surti Buffalo on an Organized Farm	97
<i>G.M. Pandya, C.G. Joshi, D.N. Rank, V.B. Kharadi, B.P. Bramkshtri, P.H. Vataliya, P.M. Desai and J.V. Solanki</i>	
11. Production Performance and Identification of Superior Germplasm of Banni Buffalo Under Field Condition	105
<i>K.P. Singh and A.P. Chaudhary</i>	
12. Study on Daily Milk Yield, Milk Constituents and Production System of Banni Buffalo	111
<i>K.P. Singh and A.P. Chaudhary</i>	
13. Methods for the Estimation of Genetic Parameters.....	115
<i>B.L. Pander and S. S. Dhaka</i>	
14. Open Nucleus Breeding System and Genetic Improvement of Livestock in Developing Countries	127
<i>B.N. Shahi and P.P. Dubey</i>	
15. Goat Genetic Resources, Animal Husbandry Practices and Their Improvement in Uttarakhand	137
<i>R.S. Barwal, C.V. Singh and C.B. Singh</i>	
16. Goat Genetic Resources of Gujarat: Production System and Improvement Strategy	143
<i>K.P. Singh and A.P. Chaudhary</i>	
17. Sonadi Sheep in Their Breeding Tract	151
<i>S.P. Tailor and O.P. Pathodiya</i>	
18. Sire Evaluation for Growth and Fleece Yield Traits Using Animal Model in Chokla Sheep	165
<i>Ravindra Kumar and C.V.Singh</i>	
19. Rural Poultry Farming: Present Status and Future Strategy for Sustainable Production in North East Region	179
<i>S. Malik</i>	

Part – II: Modern Breeding Technologies

20. Integration of Conventional and Molecular Approaches of Genetic Selection for Disease Resistance	195
<i>Arjava Sharma and Anuj Chauhan</i>	
21. Chromosome and Genome Analysis by Fluorescence in situ Hybridization	205
<i>B. Prakash</i>	
22. Molecular Approaches in Animal Breeding: Present Status and Future Prospects	219
<i>P. Kumarasamy</i>	

23. Application of Molecular Genetic Technologies in Animal Breeding: Potentials and Practicability in Indian Scenario	227
<i>B. Prakash and Deepika</i>	
24. Genetic Resistance to Mastitis in Dairy Cattle	241
<i>A.K. Ghosh, C.V. Singh and R.S. Barwal</i>	
25. Molecular Studies on MX1 Gene in Chicken by PCR-SSCP Technique	255
<i>C. Mishra, D. Das, Pushpendra Kumar, K. Khanna, A.S. Selvaramesh S. Dayal, A.P. Singh, N.K. Nagpal, B. Bhushan and A. Sharma</i>	
26. Study of Prolactin Gene Polymorphism in Crossbred Cattle by PCR-RFLP and the Association of Different Genotypes to Various Traits	261
<i>Verma, P. and Singh, C.V.</i>	
27. Assessment of Sperm Chromatin Compactness and Integrity in Mammalian Semen Sample	275
<i>C.S. Mukhopadhyay, P.P. Dubey and A.K. Gupta</i>	

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READERSHIP : Animal Genetics and Breeding, Livestock Production and Management, Veterinary and Animal Sciences, Biotechnology, Breeding and Genetics. The book presents conventional and modern breeding technologies in the vital areas of animal breeding, to stimulate more research, and to rapidly pass such modern techniques to scientific community.

Various conventional breeding technologies used for selection and faster multiplication of superior cattle and buffalo germplasm have contributed significantly to increase in milk production, which were mainly due to the technologies developed in the areas of quantitative genetics and reproductive biology. These included methodologies for selection of females based upon their expected producing ability and young males based on the performance of progeny.

Emerging developments in the areas of molecular marker systems in animals, genome maps, methods of detecting Quantitative Trait Loci (QTL) linkages, Marker Assisted Selection (MAS) etc., are latest tools to be used in breeding programmes for enhancing the rate of genetic progress. These modern techniques could be of great help for those traits, for which the conventional technologies have limitations in their use. Therefore, integration of molecular markers with conventional breeding technologies involving pedigree and phenotypic information are probable future breeding tools for genetic improvement of livestock and poultry.

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